

## RESEARCH GRANTS:

- Principal Investigator: Luqi. “Automated Generation of Prototyping Tools: A PSDL Translator.” Foundation Grant, NPS: FY1987: \$68,000.
- Principal Investigator: Luqi. “Automated Rapid Prototyping Environment.” National Science Foundation: CCR-8710737: FY1988-1990: \$60,000. Engineering Initiation Award.
- Principal Investigator: Luqi. “Normalized Specification for Identifying Reusable Components.” Foundation Grant, NPS: FY1988: \$39,000.
- Principal Investigator: Luqi. “Automated Software Tools for the Design of Large Ada Software Systems.” Office of Naval Research, Applied Research and Technology, Naval Direct Funding: FY1989: \$45,000.
- Principal Investigator: Luqi. “Execution Support of a Computer Aided Prototyping System for Real-Time Systems.” Office of Naval Research, Division of Computer Science Parallel and Real-Time Program, Naval Direct Funding: FY1989: \$29,000.
- Principal Investigator: Luqi. “Software Test Site for Knowledge Based Software Assistant.” Rome Air Force Development Center, Research Software Testing: FY1988-1989.
- Principal Investigator: Luqi. “Models for Evolutionary Software Development.” Navy Ocean Systems Center: FY1989: \$30,000.
- Principal Investigator: Luqi. “Execution Support of a Computer Aided Prototyping System for Real-Time Systems.” Office of Naval Research, Division of Computer Science, Parallel and Real-Time Program, Naval Direct Funding: FY1989: \$36,000.
- Principal Investigator: Luqi. “Automated Software Tools for the Design of Large Ada Software Systems.” Office of Naval Research, Applied Research and Technology, Naval Direct Funding: FY1990: \$124,500.
- Principal Investigator: Luqi. “Software Prototypes of C3I Systems.” Office of Chief of Naval Operations, Department of the Navy: FY1990: \$100,000.
- Principal Investigator: Luqi. “Automatic Generation of CAPS User Interface.” Naval Surface Warfare Center: FY1990: \$20,000.
- Principal Investigator: Luqi. “Rapid Prototyping of Hard Real-Time Systems.” National Science Foundation: FY1991-FY1997: \$500,000. Presidential Young Investigator Award and Matching Funds from Computer Industry:

Ontologic Inc.:	\$24,000
Persistent Data Systems, Inc:	\$15,000
Syscorp:	\$15,000
SUN Microsystems, Inc.	\$55,000
Xinotech Research, Inc.	\$15,000

Apeng, Inc. \$15,000  
Osiris Industries, \$ 5,000

- Principal Investigator: Luqi. "ALS/N for Translating CDS Prototypes." Navy Sea Systems Command Department of the Navy: FY1991: \$100,000.
- Principal Investigator: Luqi. "Low Cost Combat Direction System." Navy Sea Systems Command Department of the Navy: FY91-92: \$140,000.
- Principal Investigator: Luqi. "Execution Support of a Computer Aided Prototyping System for Real-Time Systems." Office of Naval Research, Division of Computer Science, Parallel and Real-Time Program, Naval Direct Funding: FY1991: \$38,000.
- Principal Investigator: Luqi. "Rapid Prototyping for Distributed Applications." National Science Foundation, International Travel Grant: FY1991-FY1993: \$9,606.
- Principal Investigators: Luqi and Shing. "Computer Aided Prototyping of Real-time Systems." Naval Research Lab, Naval Direct Funding: FY1992: \$195,110.
- Principal Investigator: Luqi. "A Computer Aided Prototyping System for Embedded Software." DoD Ada Joint Program Office: FY1992: \$175,000.
- Principal Investigator: Luqi. "Models for Prototypes of Dynamic Systems." Office of Naval Technology Naval Surface Warfare Center: FY1991-92: \$150,000.
- Principal Investigator: Luqi. "Modeling of Real-Time Systems at NRL." Office of Naval Technology Naval Research Laboratory: FY1991-94: \$150,000.
- Principal Investigators: Emery and McCaffrey. "Policy Issues Concerning the Ada Mendation within the DOD." Office of Director of Defense Information & Office of the Assistant Secretary of Defense: FY1991: \$108,000.
- Principal Investigator: Berzins. "Deadlock Detection in Distributed C3I Systems." Office of Chief of Naval Operations, Department of the Navy: FY1992: \$100,000.
- Principal Investigator: Luqi. "Formal Methods in Software Engineering." Air Force Office of Sponsored Research: FY1992: \$20,000.
- Principal Investigator: Luqi. "Computer-Aided Prototyping of C3I Systems." C3 Curriculum Naval Direct Funding: FY1993: \$45,000.
- Principal Investigators: Berzins and Luqi. "Models for Prototypes of Dynamic Systems." NSWC: FY1993: \$67,500.

- Principal Investigators: Luqi and Shing. "Computer Aided Prototyping of Real-time Systems." Naval Research Lab, Naval Direct Funding: FY1993: \$119,488.
- Principal Investigator: Luqi. "Formal Methods for Software Development." Army Research Office: FY1993: \$10,000.
- Principal Investigators: Berzins and Luqi. "Real-Time Prototype for Evaluating GPS Missile Control." NSWC: FY1994: \$30,000.
- Principal Investigators: Luqi and Shing. "Computer Aided Prototyping of Real-time Systems." Naval Research Lab, Naval Direct Funding: FY1994: \$119,488.
- Principal Investigator: Luqi. "A Computer Aided Prototyping System for Embedded Software." DoD Ada Joint Program Office: FY1993-4: \$175,000.
- Principal Investigator: Luqi. "Domain Specific Architectures for Computer Aided Prototyping of C3 Systems." C3I Group, NPS Naval Direct Funding: FY1994: \$47,000.
- Principal Investigator: Luqi. "Formal Methods for Software Development." ARO, ONR, ARPA, & NSF: FY1994-5: \$35,000.
- Principal Investigator: Berzins and Luqi. "Formal Models Used for Automation in Software Development." Army Research Office: FY1994-7: \$195,000.
- Principal Investigators: Berzins, Luqi and Shing. "Computer Aided Prototyping Systems for Development." Naval Research Lab, Naval Direct Funding: FY1995: \$69,000.
- Principal Investigator: Luqi. "Formal Methods for Software Development." Army Research Office: FY1995-6: \$12,000.
- Principal Investigator: Berzins and Luqi. "A Computer Aided Prototyping System for Embedded Software." DoD Ada Joint Program Office: FY1995-6: \$100,000.
- Principal Investigator: Luqi. "Formal Methods for Software Development." DoD Ada Joint Program Office: FY1995-6: \$5,000.
- Principal Investigators: Berzins, Luqi and Shing. "Computer Aided Prototyping Systems for Development." AJPO, Naval Direct Funding: FY1996: \$48,000.
- Principal Investigators: Berzins, Luqi and Shing. "Computer Aided Prototyping Systems for Development." NCCOSC, Naval Direct Funding: FY1996: \$50,000.
- Principal Investigator: Berzins and Luqi. "Applying CAPS to ATACMS." ARL: FY1996: \$48,000

- Principal Investigator: Luqi. "Defense Modeling and Simulation Resource." NCCOSC: FY1996: \$30,000.
- Principal Investigator: Luqi. "Autonomous Agents Applicable to the Real Time Retargeting Program." NCCOSC: FY1997: \$30,000.
- Principal Investigator: Luqi. "Distance Learning Degree Program." NCCOSC: FY1997: \$33,500.
- Principal Investigator: Luqi. "Integration and Risk Assessment for Joint C4I Systems." Institute for Joint Warfare Analysis: FY1997: \$15,000.
- Principal Investigator: Luqi. "Digital Network Maximization & Dual-Use Technology." Office of Naval Research: FY1997: \$13,500.
- Principal Investigator: Luqi. "Guidelines/Software Architecture for Risk Assessment." US Navy: FY1997: \$15,000.
- Principal Investigator: Luqi. "Computer-Aided Prototyping Applied to ATACMS." US Navy: FY1997: \$8,500.
- Principle Investigator: Luqi. "Automation Support for Software Generation and Adaptation." National Science Foundation, GPG, NSF 99-2: FY1998-99.
- Principle Investigator: Luqi. "Language Support for Adaptable Software Architectures." National Science Foundation, GPG, NSF 99-2: FY1998-99.
- Principle Investigator: Luqi. "An Architecture for Digital Network Maximization and Combined Network Management." DARPA: DARPA BAA-98-26: FY1998.
- Principle Investigator: Luqi. "Developing Technology for Collaborative Engineering and Knowledge Dissemination with Applications to Simulation And Software Engineering." NSF: NSF 98-55 KDI/KN: FY1998.
- Principle Investigator: Luqi. "Automatic Generation of Adaptable Simulation Software." National Science Foundation: NSF 98-64: FY1998.
- Principle Investigator: Luqi. "Collaborative Research – Process Automation for Collaborative Engineering." National Science Foundation: NSF 98-139 NSF-CNPq: FY1998.
- Principle Investigator: Luqi. "Computer Aided Prototyping for COE/DII." DISA: FY1998-99
- Principle Investigator: Luqi. "Computer Modeling for Network Centric C4I Systems." IJWA: FY1998-99.
- Principle Investigator: Luqi. "Analysis of Secure Real-Time Re-Targeting Requirements for the TLAM Missile." SPAWAR: FY1998-99,"
- Principle Investigator: Luqi. "Information Technology for Damage Control." Office of Naval Research: FY1998-99.

- Principle Investigator: Luqi. "Software Technology for TechSat 21." ONR: FY1998-99.
- Principle Investigator: Luqi. "Digital Network Information Mediation and Exchange Management." ONR: FY1998-99.
- Principle Investigator: Luqi. "Information Systems Security." ONR: FY1998.
- Principle Investigator: Luqi. "Digital Network Maximization." ONR: FY1998.
- Principle Investigator: Luqi. "High-Level Software Architecture for Re-engineering AN/TRC-186A Systems." ONR: FY1998.
- Principle Investigator: Luqi. "Modeling Shipboard Meteorological and Oceanographic Observing System." ONR: FY1998-99.
- Principle Investigator: Luqi. "Wireless Control System Monitor." ONR: FY1998: \$25,000.
- Principal Investigator: Luqi. "CAPS." SPAWAR: FY1998-01: \$30,500.
- Principal Investigator: Luqi. "Engineering Automation for Computer Based Systems." ARO and NSF: FY1998-99: \$30,000.
- Principal Investigator: Luqi. "Improved Communication and Decision Support." NAVSEA: FY1998: \$30,000.
- Principal Investigator: Luqi. "System Engineering and Evolution Decision Support." ARO: FY1998-01: \$270,000.
- Principal Investigator: Luqi. "Modular Software Architecture for Janus." US Army: FY1998-01: \$60,000.
- Principal Investigator: Luqi. "Distance Learning Software Engineering Program." SPAWAR: FY1999-01: \$291,000.
- Principal Investigator: Luqi. "Distance Learning Software Engineering Program." US Army: FY1999: \$52,000.
- Principal Investigator: Luqi. "Engineering Automation for Computer-Based Systems." NSF: FY1999: \$15,000.
- Principal Investigator: Luqi. "Engineering Automation for Computer-Based Systems." SPAWAR: FY1999: \$10,000.
- Principal Investigator: Luqi. "Engineering Automation for Computer-Based Systems." ONR: FY1999: \$15,000.
- Principal Investigator: Luqi. "Modular Software Architecture for Janus." TRAC: FY1999: \$40,000.
- Principal Investigator: Luqi. "Systems Engineering and Evolution Decision Support." US Navy: FY1999: \$6,000.

- Principal Investigator: Luqi. "Systems Engineering and Evolution Decision Support." Army Research Office: FY1999: \$90,000.
- Principal Investigator: Luqi. "CIDE Supporting Technology/ Infrastructure." NAVSEA: FY1999: \$100,000.
- Principle Investigator: Luqi. "Modular Software Architecture of Janus (A)." TRAC Monterey: FY1999.
- Principle Investigator: Luqi. "Information Systems Security." ONR: FY1999.
- Principle Investigator: Luqi. "Digital Network Maximization." ONR: FY1999.
- Principle Investigator: Luqi. "High-Level Software Architecture for Re-engineering AN/TRC-186A Systems." Office of Naval Research: FY 1999.
- Principle Investigator: Luqi. "Integrated Model-Based Software Generator for Building Highly Reliable Software Systems." National Science Foundation: FY 2000.
- Principle Investigator: Luqi. "Next Generation NASA Infrastructure for Synthesizing Space and Ground Very Large Distributed Systems." NASA: FY2000.
- Principal Investigator: Luqi. "Computer-Aided Engineering of Heterogeneous Systems." DARPA: FY2000: \$190,000.
- Principal Investigator: Luqi. "Engineering Automation for Reliable Software." USARO: FY2000: \$1,249,000.
- Principle Investigator: Luqi. "Assessment of DMSO Conceptual Models of the Mission Space." Defense Modeling & Simulation Office (DMSO): FY2000: \$75,000.
- Principle Investigator: Luqi. "Dynamic Configuration and Assembly of Very Large Distributed Systems Using Abstract Adaptable Gauges." DARPA/ISO: FY2000: \$175, 000.
- Principle Investigator: Luqi. "XML Technology Assessment." Joint C4ISR Battle Center: FY2000: \$150, 000.
- Principle Investigator: Luqi. "Monterey Workshop 2001-Engineering Automation for Software Intensive System Integration." ARL-ERO and Chief Electronics and Physics, U.S. Army Research Development and Standardization Group: FY2000, \$15, 000.
- Principle Investigator: Luqi. "Weapon Software Safety Program in NPS Software Engineering Automation Center." Naval Sea Systems Command (SEA-53): FY2000: \$1,500,000.

- Principle Investigator: Luqi. “Architecture and Prototype for a Dynamic Distributed Synthetic Natural Environment.” AMSO/SIMTECH: FY2000: \$350,000.
- Principle Investigator: Luqi. “Integration of Heterogeneous Software Systems through Computer-Aided Resolution of Data Representation Differences.” Office of Naval Research (ONR/Naval Fleet/Force Technology Innovation (NFFTI): FY2000: \$50,000.
- Principle Investigator: Luqi. “Investigations and Research of Fleet-Wide Desktop Video Conferencing.” Office of Naval Research (ONR): FY2000: \$50,000.
- Principle Investigator: Luqi. “XML Technology Assessment.” Joint C4ISR Battle Center: FY2001: \$310, 000.
- Principle Investigator: Luqi. “Performance Measurement of the METCAST Server.” CMDR, Space and Naval Warfare Systems Command METOC Systems Program Office (PMW-185-1) FY2001: \$180,000.